

TCEQ HRVOC Stakeholder Group
HRVOC Emissions Cap and Trade Proposal
May 3, 2004
9:00 A.M.
TCEQ Building F, Room 2210, Austin, Texas

Update on HRVOC SIP Proposal

Ashley Forbes provided two handouts (similar to those provided at the April 16, 2004 Work Session) summarizing the current scope of proposed revisions to the HRVOC rules. The proposed rule revisions to Chapter 115 are scheduled to be considered at the May 26th agenda. Draft rule language is not available (at the time of the meeting), because the commissioners prefer to have time to review the draft before it is released to the public. It will likely be available some time after it is filed on May 7th. Another stakeholder meeting to discuss rule language may be held during the public comment period. The comment period will run concurrently with that for the cap and trade program, giving stakeholders plenty of time to review the rules.

So far, staff has been directed by the commissioners to proceed with "Option 1" for revising the fugitive audit provisions. The audit program will be maintained, but changes will be proposed to make it feasible for the agency to manage.

Introduction of HRVOC Emissions Cap and Trade (HECT) Program

Susana Hildebrand and Cory Chism provided a summary handout and draft rule language for the HECT program. The goals are to establish an enforceable program within the timeline established by EPA and to allow trading. Comments on the drafts presented are requested by close of business Friday, May 7th.

Per the draft plan, any site in the HGA subject to Chapter 115, Subchapter H, Divisions 1 or 2 is subject to the HECT program. Sites with emissions less than 10 tons per year (TPY) of HRVOC from covered sources are not subject to the program, but these sites can "opt in" to the HECT. Initial data indicates that approximately 51 out of 150 sites could be less than this level. Sites that opt into the program would be given a cap less than 10 TPY. If exempt or opt-in sites wish to expand in the future to a level greater than 10 TPY they would need to acquire allowances from the market. Exempt sources that do not opt into the HECT initially would have to acquire allowances equal to the full emission level desired, while opt-in sources would only need to acquire allowances equal to the difference between the desired emission level and the initial cap.

The HRVOC allowance allocations will be determined by a level of activity based on production and use of HRVOC at a site compared to the total production and use of HRVOC in Harris County or in the other 7 counties. Allocations will be set aside for storage and loading facilities and for petroleum refineries. The production or use criteria will not be appropriate for these 2 sectors, since they do not "use" or produce HRVOC but do have potential for HRVOC emissions.

The baseline period for the level of activity certification will be any 3 consecutive years between 2000-2004. If 3 consecutive years are not representative due to "extenuating circumstances" a facility can apply to use an alternate period, but the extenuating circumstance cannot be based on economics.

Compliance with the annual cap will be based on monitoring data per Chapter 115 Subchapter H. The hourly maximum limit also continues to apply. Maintenance, startup, shutdown emissions and emission events are included, but if the hourly cap is exceeded the emissions over the hourly cap are not included in calculating the annual cap.

The HECT is designed to be as similar to the NO_x mass emissions cap and trade program as possible. One difference is a geographical restriction on emissions. Emissions of HRVOC cannot be traded between Harris County and the other 7 counties.

Stakeholder Comments/Discussion

- Participants asked how allocations would be determined for co-located facilities (e.g. natural gas liquids with chemical plant or refinery, olefins, and chemical plants).
 - Level of activity would be determined for each process unit and summed to get the total level of activity for a site.
- How is production and use defined? What if a site uses and produces HRVOC?
 - Level of activity is on a process unit basis. If a facility produces and uses HRVOC, it would count on both ends. See §101.394(b).
- A participant noted that if Unit A produces and Unit B uses HRVOC it would be counted twice in the total. If a unit ships HRVOC to another site, it would only count once.
 - There will be some inequities for sites that ship to different sites. The problem is that we do not have actual data on emissions, and are using production and use as a surrogate. Emissions would be expected each time HRVOC is handled.
- A participant expressed concern about confidential business data in the level of activity certification reports.
 - The sum for the site would be public, but the breakdown could be provided in a confidential submittal.
- How would a new source acquire allowances?
 - A new source would have to buy into the program or limit HRVOC emissions from covered sources to less than 10 TPY.
- Are there plans to reconcile the production and use information to the emission inventories (EI)?
 - Historically such comparisons have been made, but they foresee a big discrepancy in the HRVOC data. Staff is hoping to find other ways to check the HRVOC data. They have been sharing data from the NO_x MECT with the EI folks, but do not want to use resources to compare the HRVOC data if the information will not be used.
- How will the commission decide how much to allocate for each sector?
 - The storage and loading sector will be allocated up to 10% of the total. A portion of the 10% may be reallocated to the other sectors depending on the number of applications received. Staff is still trying to determine how to define the allocation for the refinery sector. They are looking at the EI reported in 2000, the revised EI, and the original caps. The “big pie” (total HRVOC to be allocated) is based on the value that was modeled to demonstrate attainment.
- Will the HECT process redo the previously allocated caps?

- Yes
- Must each process unit at the site use the same baseline?
 - Yes
- What about allocations for sites that started up in 2004? Will there be provisions similar to those in the NOx program?
 - Staff has not envisioned similar provisions for the HECT, but “understand if you want to comment” on this issue.
- If an “exempt” site does not opt in to the HECT, could they later buy allowances to go above 10 TPY?
 - Yes, but they would have to buy the full allowance. If a site has opted in and received a cap less than 10 TPY, they would only have to purchase allowances to make up the difference between their opt in cap and the desired level.
- Have the errors in the inventory been corrected? Is the exemption level 10 tons of actual emissions?
 - Staff hopes that the monitoring required by Chapter 115 will tell us what emissions are really out there. Sites excluded from the cap would still be subject to the monitoring provisions in Chapter 115. They used the imputed inventory to identify the sites with less than 10 tons. Modeling showed that the exempt sites would give an ozone level of 0.4 ppb. Staff has not been directed to remove the 10 ton exemption, but could be given different direction before the rules go to proposal. (If it’s not in the proposal they got different direction.)
- What was the rationale for the different trading areas?
 - Different species are defined as HRVOC in the different areas, so the proposal would limit trading to keep the rule simpler. If trading between Harris County and the other counties was allowed, they would have to account for different-flavored allowances. Staff will not do this unless they are directed to. In addition, the modeling has identified that the most reductions are needed in the ship channel - Harris County area.
- Will the caps be reset in the future based on monitored data?
 - There are no plans at this time to do so, but they have thought about it.
- Are all species of HRVOC treated the same?
 - Within the area all species are treated the same. Note that trading does not affect permit allowables. Some permit limits are based on toxicity (butadiene).
- What about reactivity effects?
 - That is a good question, but in the agency the designated species have been lumped together. Would the complexity of capping species separately be worth the added complexity?
- What about NOx and HRVOC equivalency?
 - There is not enough information to determine it at this time.
- What about VOC vs. HRVOC?
 - This could be considered in the future, but if it is monitoring data on VOC would be needed.
- How would pipeline facilities be treated?
 - They would be in the 10% sector (storage and loading) if they had equipment subject to Division 1

- or 2. If they had a pipeline flare and greater than 10 tons per year they would be subject.
- What if they had a pipeline flare that had an emission event that caused it to exceed 10 tons?
 - Not sure how that would be handled, but remember to use the short-term limit in the annual calculations (if emissions exceeded the short-term limit).
 - How would a propylene refrigeration system be handled? Normally it just has fugitive emissions, but they do have cooling water circulation. They “use” a large quantity when they charge the system.
 - Distinguish between start-up and normal operation. Staff will have to think about how they should be handled. The definition of “level of activity” excludes recycled HRVOC internal to the process unit and so would not include use in a refrigeration system.
 - Refrigeration units can have startup, shutdown, maintenance (SSM) emissions. It makes a difference since SSM emissions are now included in the cap.
 - Staff will look at this issue.
 - What if a unit was idle during the baseline period but will be restarted in the future?
 - If it was idle due to economics it would be counted as new.
 - What is the basis for excluding economics as an extenuating circumstance?
 - It goes back to the NOx rules and is part of the credit and trading philosophy. Anyone could argue “economic fluctuation” and they have to draw the line at some point. The NOx rule did not have a good definition for extenuating circumstances so they provided guidance in the HRVOC rule.
 - If a company made a business decision to idle a process unit during 2002, the downturn would be built into their level of activity and cap allocation. If they were idle in any of the other baseline years they could still have a consecutive 3-year period that would not include the idle year. Why is the baseline period 3 years? Is the consecutive year provision hard and fast?
 - The 3-year period came from the NOx rule. The individual making the comment is invited to comment on it. The consecutive year provision is firm.
 - What is the basis for not building in flexibility for units that have been permitted but not yet built?
 - The cap modeled in the SIP did not account for new construction, but staff invites comment. If there is a provision for these units, the caps for all existing facilities would be smaller.
 - Fugitive rules say they have to shut down to fix leakers. The shutdown emissions would count against their cap. Has this been considered?
 - Good comment. Staff has not looked at this. Commenter is urged to make the comment in writing.
 - What if a site is split after allocations are set? (E.g. part of site is sold.) Is there a mechanism to split the allocation?
 - The allowances could be sold along with the equipment. This should be included in the discussions prior to the sale. Buyers should make sure that allowances are included. There has been confusion in some cases where equipment under the NOx rules has been sold and it was not clear whether the buyer or seller owned the allowances.
 - If they bought a facility with allowances and it was down during one of the baseline years, would that be extenuating?

- Don't know; would need more information.
- On page 46, the draft rules state that for emission events “in compliance with” the reporting requirements in Chapter 101 emissions exceeding the short-term limit are not used in calculating the annual emissions. What if a reporting deadline is missed? Would they have to use the full amount of the emissions?
 - It was not intended that sources would have to use the full emissions if a reporting deadline was missed.
- Is the 10% penalty for exceeding the cap permanent?
 - No, the penalty is only for a single year.
- For batch plants, the 25% reduction of the cap for the first year may be a problem depending on production schedules and product mix.
 - Staff has not looked at this possibility and encourages the individual to comment with suggestions on how to handle the issue.
- Is there some percentage below which a stream would be excluded from consideration?
 - None yet.
- Are there any limitations on banking and carryover of allowances?
 - There is no limit on quantity, but they can only carry over unused allowances for one year and the current year allowances are used before the vintage. Example: Excess 2006 allowances could be carried over to 2007. In 2007, the 2007 allowances would be used before the carried-over 2006 allowances. If the 2006 allowances were not used in 2007, they would expire.
- When will the Subchapter H enforcement rules be available?
 - Probably next week.
- Have they considered making the short-term limits applicable only for certain portions of the year?
 - It has come up, but only in regard to enforcement consequences.
- What about making the short-term limit applicable only during the time of day corresponding to peak ozone generation?
 - No. If they allowed consideration of the time of day of the release, they would also have to look at windspeed to see whether the release would still be in the airshed during peak ozone time.
- Will the “AC” values be shown in the proposed rules?
 - Yes.
- Have emission events been backed out from the pie?
 - No. The pie is based on modeling; emission events were not backed out.
- Page 39 of the rules state that the level of activity for a site is determined by summing the levels of activity for all process units at the site (that produce or use HRVOC). This point should be added to the definition of “level of activity.” Allocations are made on an account basis.